Introduction to Lean Six Sigma Processes Training Seminar Content

Lean Six Sigma Introduction Course Content

• Seminar Contents Overview

Introduction to Lean

• Lean Principles
• Lean Concepts
• The Six Production Losses
• The 7 Wastes and Others
• The Seven Process Wastes
• Looking for ‘Waste’ in Processes
• Benefits of Lean
• Monitoring Operating Effectiveness
• Production Losses and Overall Equipment Effectiveness
• Just-in-Time vs. Work-in-Progress
• Work-in-Progress Batch Inventory

The Critical Lean Concepts

• To Be Lean = Eliminate Non-Value
• “Would the Customer be less satisfied with the product if this step were left out?”
• Schedule to Match Takt Time
• Refine Your Value Adding Stream
• To Have Flow = Standardise & Level
• Benefit of Flow
• When Applied To Business Processes
• History of Value Stream Mapping
• The Concept of Customer Value and Non-Value
• The Value Stream Concept
• Discovering the Hidden Factory
• The Hidden Factory
• Another View of the ‘Hidden Factory’
• Straighten the Workflow
• Total Productive Maintenance is … operator driven reliability:
• The Operators’ Creed of TPM –
• TPM Works by Reducing Risk of Failures
• Standards and Standardisation
• Standardise the Work
• Developing Standardised Work
• 5S Creates a Visual Factory
• The 5S Cycle
• 5S Activities Explained

Lean Process Example

• Process Investigation
• Collecting Data from the Process
• The Current State Map
• Example of Current State Map
• Spotting Productivity Improvements
• Visualise Productivity Improvements
• Future State Map
• Future State Map
• Implementation Plan
• Repeat the VSM Process
Lean Six Sigma Introduction Course Content Continued

Introduction to Six Sigma

• What Six Sigma Means
• Defining What Good Performance Is
• Chance of Failure at Each Sigma Level
• Journey to 6 Sigma - Minimizing Variability
• What is Variation
• The Problems Start with Variation
• Causes of Variation

The Importance of Controlling Variation

• Where Profit is Lost in Business Processes
• Defects Cause Failure
• Failures Misuse Time and Resources
• The Best are Proactive – They Do Defect Elimination and Failure Prevention
• Problems are Variations Caused by Defects
• Stop Defects and you Stop Problems
• Reducing Variation with a Quality System
• The Purpose of a Quality Management System
• Planned Efforts to Remove Variation
• Applying Six Sigma for Improvement

Applying Six Sigma

• Where Profit is Lost in Business Processes
• Why Organizations Lack Focus
• Roles in Six Sigma
• Six Sigma DMAIC process
• Six Sigma Project Life Cycle
• Problem Difficulty Distribution
• Defining Precision
• The Odds are Against Doing it Right!
• The Story in Human Error Rate Tables
• Human Factors – the limitations of People
• 12 Most Common Causes for Human Errors
• Apply Basic Statistical Control and Visual Management
• When Process Variability is Out-of-Control
• Process Quality Control Starts by Setting Outcome Limits
• Journey to 6 Sigma: Control Your Processes
• Move to ‘Preventive’ Quality Control
• 4 Pillars of Quality Management Systems

Introducing Lean Six Sigma into Organisations

• Elements of a Good Management System
• What Are the Critical Success Factors?
• Start Measuring Plant Non-Performance
• Getting high task reliability needs quality
• Understanding what it means to be ‘in control and capable’
• Accuracy Controlled Enterprise (ACE) Standard Operating Procedures Adds Statistical Process Control to Work Processes
• Remove variation … by setting standards and measuring accuracy
• Accuracy Controlled Enterprise (ACE) Procedures
• The Accuracy Controlled Enterprise is…
Lean Six Sigma Introduction Course Content Continued

• Accuracy Controlled SOPs Remove Variation with Proactive Statistical Process Control
• 7 Primary Quality Control Tools
• When to Apply the Quality Control Tools
• Pareto Chart the Problems for Focus

Six Sigma Process Example

• The Interested Parties and Business Consequences Supplier
• Identify the Process and Responsibilities
• Measure the True Situation
• Value Added for Customer
• Analyse for Causes and Wastes
• Improve the Process
• Control Process & Imbed Improvements
• Remove Roadblocks in the Way to Lean
• Change Management Matrix
• Management of Change
• Collaboration is unnatural …
• For change to be successful and effective in the long term, it is necessary that there is: